

REMARKS

Claims 10-15 were presented in the amendment filed 12/12/2006 and have not yet been examined. The present amendment amends claim 10 and 12, cancels claims 11 and 14-15, and adds claims 16-21. Accordingly, claims 10, 12-13, and 16-21 are now pending in the application. Reexamination and reconsideration of all outstanding rejections and objections is requested.

Claims 10 and 11 are rejected under 35 U.S.C. §102(e) as being anticipated by Lipscomb.

Amended claim 10 recites software that when executed is operable to display a plurality of secondary spatial images within a Web page on a client computer coupled to a network environment. The secondary spatial images are components of a multi-dimensional image, having more than two-dimensions. Locations in the secondary two-dimensional spatial images are specified by values of first and second coordinates which specify locations in the components of the original multi-dimensional image.

The software when executed is operable to select a particular location on a two-dimensional secondary spatial image having particular values of the first and second coordinates, where selecting the particular location on the two-dimensional spatial image determines a multi-dimensional coordinate including at least a third coordinate value which, together with the first and second coordinates, indicates an indicated location in the original multi-dimensional image and initiates access to a location in a secondary image map homologous to the indicated location to retrieve a retrieved object index for the indicated location after the location of the two-dimensional secondary spatial image displayed on the client computer is selected.

The software when executed is operable to cause a server computer coupled to the network environment to utilize the retrieved object index for the indicated location to access a program action associated with the indicated location.

The reference Lipscomb et al. generates and displays hotlinks in a panoramic scene. The mechanics of the panoramic scene are depicted in detail in the Chen patent, US Patent No. 5,396,583 (attached hereto) cited in Lipscomb at (2:7). As depicted in Chen at Fig. 2 and described at (6:21-30), a two-dimensional panoramic view is wrapped around a cylinder (Fig. 3). Different views are projected from a viewpoint in the center of the cylinder.

As depicted in Lipscomb at Fig. 2 and described at (4:10-35) the cylindrical environmental map is a two-dimensional rectangle with pixels characterized by row and column indices. The system described in Chen and Lipscomb allows a user to rotate and see different parts

of the panoramic two-dimensional scene wrapped around the cylinder to create an illusion of three-dimensional space. However, there is no volume information inside or outside of the two-dimensional representation.

A second, smaller rectangular array (Fig. 3) is a hotlink array and there is a mapping between the cylindrical environmental map and the hotlink array. (5:1-25). A color value is stored in pixels of the hotlink array to indicate whether associated pixels in the cylindrical environmental map are included in the hotlink. (5:35). The value of a red color held in a hotlink pixel indexes a table of actions. (6:14-24).

The examiner states that Lipscomb teaches a primary map as the “cylindrical environment map” and a secondary image map as the “hotlink environment map” and that the first coordinate is taught as the “x coordinate” and is read from the column range index, and the second coordinate is the “y coordinate” and is read from the row index. The additional coordinate is the red color value of the pixel at the “x-y” coordinate to identify the hotlink area.

This rejection is respectfully traversed for the following reasons. As described above, in the system recited in claim 10 a plurality of two-dimensional secondary images are displayed. These two-dimensional secondary images are components, e.g., slices of a three-dimensional volumetric image or a frame in a video clip, of a multi-dimensional image having more than two dimensions. Locations in the two-dimensional secondary images are specified by first and second coordinates.

As described in the specification at page 3, the multi-dimensional image could be a medical anatomy volume image, for example a three-dimensional view of an embryo, with each location in the three-dimensional volume image specified by x,y,z coordinates. A particular slice of the three-dimensional image, for example a slice taken at z=fixed value, would be a two-dimensional image. That two-dimensional image could be displayed and an indicated location in the two-dimensional image is specified by x,y coordinates. However, because in this example all locations in the displayed two-dimensional image have the same value of the z coordinate, i.e., z=fixed value, the position of the indicated location in the three-dimensional image is specified by the x, y coordinates in the two dimensional image and the additional coordinate of z=fixed value. The selection of a location in one of the plurality of secondary spatial images determines the first, second, and additional coordinate.

These three coordinates, in this example, can then be used to index the secondary image map having an entry for each location in the multi-dimensional image. The secondary map allows a program action to be associated with each location in the three-dimensional image.

In contrast, there is no multi-dimensional image, having more than two dimensions, described in Lipscomb. That system allows different views of a two-dimensional panoramic scene to be generated from different view points. Hot data is associated with pixels in the two-dimensional environmental map using a hot link array.

The two-dimensional hot link array stores color values at each pixel indicating whether the pixel is part of a hot spot and indexing a program action associated with a hot spot in the two-dimensional array.

The color value is not an additional coordinate value that, in combination with first and second coordinate values, indicates the position of an indicated location in a multi-dimensional image having more than two dimensions. In Lipscomb there are only two dimensions, specified by x,y. The color value is not a coordinate but an index to a program. There is no relation between the color value stored in the hot link array and a coordinate in a multi-dimensional image having more than two dimensions.

Lipscomb operates in a way similar to the system described in U.S. Patent No. 4,847,604 cited in the specification at page 2. It is known in the art to link "hot data" to a two-dimensional image displayed on a computer screen.

Accordingly, Lipscomb does not fairly teach or suggest the claimed features of initiating access to a location in a secondary image map homologous to an indicated location in the multi-dimensional image, having more than two dimensions, to retrieve a retrieved index for the indicated location and utilizing the retrieved index to access a program action associated with the indicated location in the multi-dimensional image.

There is no teaching in Lipscomb of indexing a program action to an indicated location in a three (or more) dimensional image displayed on a two-dimensional component of the multi-dimensional image. Accordingly, Lipscomb does not anticipate the invention recited in claim 10 and therefore claim 10 is allowable.

The remaining claims also include limitations not disclosed in Lipscomb and are deemed allowable.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (925) 944-3320.

Respectfully submitted,

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